Exhibit 1

JUDGED NEW YORK'S 2009 'NEWSPAPER OF DISTINCTION'

THE BUFFALO NEWS

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Bills and Browns have nowhere to go but up. Page B1

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$168 *IN COUPONS TODAY*

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WEATHER

Partly sunny, breezy and cool. High temperature 53, low 35. Details on Page C8.

Derek Gee/Buffalo News

Matt Fabrizio of Rochester takes a crack at a whiffle ball on Saturday afternoon in LaSalle Park.

WEB SAMPLER

Frank Lloyd Wright enthusiasts took a close look at the Darwin

FOCUS: ENVIRONMENT

"I started this because of my own health issues, but it's gotten a lot bigger than that. — Jackie James-Creedon

Harry Scull Jr./Buffalo News

Jackie James-Creedon of the Town of Tonawanda, who founded the Clean Air Coalition of Western New York eight years ago, wants Tonawanda Coke to reduce benzene to safer levels.

Danger in the air

State study finds Tonawanda Coke emits benzene up to 75 times higher than recommended guidelines, stirring calls for action

BY MARK SOMMER

NEWS STAFF REPORTER

Lovisa Anderson ticks off the names of all the people who have had cancer, living and dead, within seven houses of her home on East River Road on Grand Island.

Anderson, 67, counts seven, including herself. She has ovarian cancer that was diagnosed last year, and has since spread to her lymph nodes.

"You're fighting for your life all the time," she said.

Jeani Thomson of the Town of Tonawanda had been diagnosed with three different cancers until 10 days ago, when she learned of a fourth. That, she said, isn't as unusual as it sounds.

"Everybody around here has thyroid [cancer]. People have a lot of leukemia, brain tumor stuff, skin cancer is like everywhere, lupus, fibromyalgia," she said.

Their stories are numbingly familiar to people who live in the vicinity of Tonawanda Coke Corp. The coke foundry recently was found by the state Department of Environmental Conservation to be emitting benzene, a carcinogen, up to 75 times higher than recommended guidelines. Those levels were up to 2½ times more than what the company reported to regulators.

Benzene has been linked to several cancers, notably leukemia, and can damage the immune system and bone marrow, impair fertility in women and irritate the skin, eyes and upper respiratory tract.

See **Coke** on Page A2

WARNING SIGNS

Two coke plants are drawing criticism

- Tonawanda Coke Corp. emitted the carcinogen benzene at levels up to 75 percent higher than recommended guidelines, according to a state study.
- Tonawanda Coke reported releasing 9,568 pounds of benzene in 2006.
- Erie Coke Corp., also owned by J.D. Crane of Elma, was fined $6.1 million last year for a "flagrant disregard" of environmental laws.

Source: The Buffalo News

BEHIND THE HEADLINES

Disgruntled employee or principled idealist?

Mark A. Sacha's firing raises questions about his campaign to prosecute G. Steven Pigeon.

BY MICHAEL BEEBE AND ROBERT J. MCCARTHY

NEWS STAFF REPORTERS

Mark A. Sacha was fired last week as a prosecutor of more than 20 years, leaving him at age 51 without a job, after he publicly accused his boss of failing to prosecute political operative G. Steven Pigeon for election fraud.

Political operative G. Steven Pigeon denies any campaign wrongdoing.

Erie County District Attorney Frank A. Sedita III, who fired Sacha for what he called misconduct after Sacha took his allegations to The Buffalo News, said he and his senior staff looked at Sacha's accusations and concluded there is no prosecutable case against Pigeon.

Is Sacha merely a disgruntled employee, as Sedita calls him, who was upset that Sedita demoted him from a deputy district attorney after Sedita took office in January? That Sacha's breaking point came after Sedita later took Sacha's business car away?

Or is Sacha a high-minded idealist, who was burned when Sedita's predecessor, Frank J. Clark, declined to prosecute Pigeon? Who was disgusted when Sedita also gave Pigeon a pass and demoted him? And who was then pushed to complain publicly when Sedita told The News that he wouldn't investigate most election fraud cases, citing a lack of staff and resources?

Sacha has called for a special prosecutor to look at Pigeon. The former Erie County Democratic Committee chief and top aide to former Rochester area billionaire and Buffalo Sabres owner B. Thomas Golisano in Golisano's political efforts denies any wrongdoing.

Sedita refused to ask for an outside

See **Sacha** on Page A2

Exhibit 1

Residents living near plant feel vindicated by state DEC study

COKE • from A1

The findings brought vindication of sorts to residents who have long suspected the plant spewed high levels of cancer-causing pollutants during the chemical process that makes black, cauliflower-shaped coke for the steel industry.

Tonawanda Coke executives refused to respond to repeated requests to comment last week by The Buffalo News.

The yearlong air quality study and a more extensive one taken inside and around Tonawanda Coke by the federal Environmental Protection Agency has raised the hopes of the Clean Air Coalition of Western New York that government agencies will reduce benzene amounts coming from the plant to a safer level.

Speakers made those demands at a spirited rally attended by 75 people Wednesday outside Tonawanda Coke.

"I started this [campaign] because of my own health issues, but it's gotten a lot bigger than that right now," said Jackie James-Creedon, a mother of two who founded the group eight years ago after being stricken with fibromyalgia, an autoimmune disease, in her mid-30s.

Tonawanda Coke is one of 52 air-regulated facilities within a five-mile radius in the Town of Tonawanda, plus sections of Interstates 190 and 290, that are sources of benzene. It is the largest producer of benzene among regional manufacturers, releasing, by its own reporting, 9,568 pounds in a year in the 2006 EPA Toxic Release Inventory.

"Tonawanda Coke is a predominant source of benzene in the community," said Tom Gentile, chief of the state Department of Environmental Conservation's Air Toxics Section.

Owner rejects study

While Tonawanda Coke owner J.D. Crane has refused to speak with media or community groups for years, he shared his views in an August letter to Sen. Charles E. Schumer, D-N.Y. It came two months after the senator's letter said the DEC study presented "irrefutable evidence" that Tonawanda Coke was the major source of benzene in the region.

ON THE WEB
RESIDENTS TELL THEIR STORIES IN A VIDEO AT VIDEO.BUFFALONEWS.COM.

Sharon Cantillon/Buffalo News

Lesley Horowitz, who moved away from her Town of Tonawanda hometown in her late teens, wonders why the air quality hasn't improved.

In Crane's letter, obtained by The News, he rejected the DEC's findings and Schumer's request to develop a benzene-reduction plan.

"A claim that any specific manufacturing or industrial facility in Tonawanda is directly responsible for regional levels of benzene in excess of air quality standards cannot be substantiated," Crane wrote.

He said the company was in "full compliance with its lawfully issued DEC air permit," and placed blame for high benzene levels on motor vehicle exhaust. "Our company has been a good neighbor in the Town of Tonawanda for decades," Crane said in conclusion, noting significant plant investment, job creation and tax revenues.

Larry Sitzman, DEC's air pollution control engineer for Region 9, said Crane's insistence that motor vehicles were the main cause of benzene emissions was wrong.

"Our study didn't show that; our study showed that the largest impact of benzene in the area emanates from Tonawanda Coke," Sitzman said.

He also said the question of the plant's being in "full compliance" with its DEC permit is under investigation.

Schumer, in a statement released to The News on Friday, said, "Tonawanda Coke has a responsibility to engage — not to stonewall — nearby residents."

Coal to coke

Tonawanda Coke, located at 3875 River Road, sits on a 188-acre site along the Niagara River. Crane acquired the plant and its five miles of railroad track from Allied Chemical in 1978, and employs about 100 workers of the United Steelworkers of America Local 4447.

The plant produces high-quality foundry coke for use in melting metal and removing impurities in steel manufacturing. The complex chemical process to make coke creates extremely dangerous vapors, including benzene.

It also causes some of the unpleasant odors that force residents to flee indoors, and produces soot that coats homes and cars.

Tom Ryan knows all about the smell of rotting eggs and burning tar. For the past 33 years, he has lived in sight of the plant on Kaufman Street in the Town of Tonawanda. Ryan, 69, has skin cancer and heart ailments, and his wife, Kathleen, has had breast cancer.

Three cats died of leukemia.

"When that coal gas comes across here, it chokes me. I have to grab my oxygen bottle or machine," Ryan said. "If it wasn't for that, I couldn't breathe."

He wonders what the health effects are on the children who play on the playground across from his home.

"If the soot settles on my car, and settles on my house, you can bet it's all in that sandbox, and it's in the wood chips and on the [playground equipment]," he says. "They should put a caution sign that says, 'Don't play in this playground, because it's being contaminated by Tonawanda Coke.' "

Ryan is convinced the heaviest and dirtiest emissions occur after dark to hide what the plant is doing.

"Some nights it gets so bad," he said.

Chemist Joseph Gardella Jr. supports Ryan's theory, based on analysis of data from a five-day study conducted by the EPA in April, which the agency has yet to analyze.

"The EPA sampled in the middle of the night when the Thruway traffic wasn't an issue," said Gardella, a University at Buffalo chemistry professor. "They'd get these spikes of huge amounts of benzene being emitted in a short time period."

Tonawanda Coke ran afoul of state and federal regulatory agencies twice in the 1990s, resulting in $77,500 in fines. But those pale next to the $6.1 million fine Crane's Erie Coke plant, located 103 miles to the southwest, was hit with in 2008 by the Pennsylvania Department of Environmental Protection for air-quality violations and a lack of cooperation to correct them.

Last month, the Department of Justice filed a complaint on behalf of the EPA for numerous violations, including air emissions above allowable limits and improper maintenance and operation of coke ovens.

Childhood friends lost

Tonawanda Coke also has benefited from public subsidies.

Braxner LLC, a real estate holding company related to Tonawanda Coke, was the beneficiary in 2006 of $130,000 in property sales and mortgage tax breaks from the Erie County Industrial Development Agency. The $600,000 renovation project allowed Vanocur Refractories, a company that makes cast blocks used in refurbishing coke ovens, to move into the building and add 40 jobs.

When the DEC released its conclusions in June, it also announced Tonawanda Coke would reduce ammonia emissions — an eye and respiratory tract irritant — by 800,000 pounds a year, along with smaller amounts of benzene and other substances.

That's an important step, Sitzman said, but he acknowledged that won't put much of a dent in the amount of benzene that will still be emitted.

Lesley Horowitz, whose parents both suffer from health ailments, recently reconnected with her Town of Tonawanda hometown. She wonders how the air quality could be so bad, for so long.

"Who has childhood friends die of cancer? I had childhood friends die when I was at Kenmore East. Now that I'm reconnecting with friends in the community, I'm finding out many of their parents have died of cancer," Horowitz said.

As the EPA and DEC ready final studies and consider remedies, the state Department of Health is mulling whether to launch a comprehensive, residential health study.

Thomson said she would welcome one if it doesn't delay enforcement action. More than anything, she wants the air over her hometown healthy again.

"When friends come here from Clarence, they say what is that smell?

"I say, 'That's the smell of Tonawanda.' "

e-mail: msommer@buffnews.com

015.02.097
GOVERNMENT
EXHIBIT
1:10-cr-00219

Exhibit 3 CW

TONAWANDA COKE CORPORATION
BOX 5007/TONAWANDA, N.Y. 14151-5007/(716) 876-6222

July 11, 2003

GOVERNMENT EXHIBIT
131
1:10-cr-00219
PENGAD 800-631-6989

Larry Sitzman
Regional Air Pollution Control Engineer
270 Michigan Avenue
Buffalo, NY 14203-2999

Dear Mr. Sitzman:

Re: Tonawanda Coke Corporation

Tonawanda Coke Corporation (TCC) operates a coke oven battery at its facility in Tonawanda, New York. The United States Environmental Protection Agency (USEPA) has proposed National Emission Standards for Hazardous Air Pollutants (NESHAPs) for coke oven batteries pursuant to Section 112 of the Clean Air Act (CAA). The proposed rule is applicable only to major sources of hazardous air pollutants (HAPs). Major sources are those that emit or have the potential to emit at least ten (10) tons per year (tpy) of any single HAP or 25 tpy or any combination of HAPs.

TCC has commissioned a Hazardous Air Pollutant Emission Inventory to determine whether its Tonawanda, New York facility is a major source of HAPs. The inventory was conducted by leading experts in the field - Enviroplan Consulting from Birmingham, Alabama. A copy of the Hazardous Air Pollutant Emission Inventory report prepared by Enviroplan dated July 2003 is enclosed. That document demonstrates that TCC's Tonawanda, New York facility is not a major source of HAPs.

RECEIVED
Region 9- Div. of Air
[illegible] 2003
[illegible] ENVIRONMENTAL CONSERVATION

If you have any questions or comments on the enclosed Hazardous Air Pollutant Emission Inventory, we would be pleased to meet with you to discuss them.

Very Truly Yours
Tonawanda Coke Corporation

Mark L. Kamholz

Mark L. Kamholz

Enclosure

HAZARDOUS AIR POLLUTANT EMISSION INVENTORY

Prepared For:

Tonawanda Coke Corporation
Tonawanda, New York

Prepared By:

Enviroplan Consulting
4500 Valleydale Road - Suite 200E
Birmingham, AL 35242
(205) 437-0545

July 2003

Exhibit 3

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1. INTRODUCTION

This document presents the technical basis for the development of a comprehensive Hazardous Air Pollutant (HAP) emission inventory for the Tonawanda Coke Plant in Tonawanda, New York. It describes the technical approach to the calculation of the potential emissions for all HAPs subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) program under Section 112 of the Clean Air Act (CAA).

Emission calculations presented in this document are based primarily on the application of the July 2001 Revised Draft AP-42 Section 12.2 (Coke Production) emission factors. Some emission estimates are based on facility-specific test data, test data at other similar facilities, and approved engineering calculation procedures, such as those reported in U.S. EPA background information documents and the technical literature. The emission calculations incorporate the following facility data/information:

1) stack test data and hydrocarbon leak detection data,

2) Material Safety Data Sheets (MSDSs) and analytical data on raw materials, products/byproducts, and waste streams,

3) operating performance information on pollution control equipment and activities,

4) plant operating and production data,

5) fuel consumption data, and

6) information on liquid loading operations.

This document is divided into eight additional sections as listed below:

2. Coke Oven Emissions

3. Emissions from Storage Tanks and Process Vessels

4. Emissions from Byproduct Plant Equipment Components

5. Emissions from Liquid Loading Operations

6. Flare Emissions

7. Boiler Emissions

8. Miscellaneous Emissions

9. Summary of Potential HAP Emissions

Exhibit 3

2. COKE OVEN EMISSIONS

2.1 CHARGING

2.1.1 Particulate Emissions

Particulate emissions from coal charging consist of condensed coke oven gas (COG), expressed as benzene soluble organics (BSO), and coal dust. BSO emissions were estimated using U.S. EPA Revised Draft AP-42 and Coke Oven NESHAP visible emission limits (i.e., 1/1/03 MACT limits) on the average seconds of visible emissions per charge, i.e.,

$$E_C = (N)(0.0042)(VE/10)$$

where

E_C = BSO emission rate (kg/yr)
N = number of charges per year
0.0042 = typical BSO emission rate per charge (kg/charge)
VE = average seconds of visible emissions per charge

Battery	NESHAP Limit Avg. Sec. Per Charge	Average Associated with NESHAP Limit (seconds)	Number of Charges per Year	BSO Emissions (kg/yr)
2	12	10	18,666	78.40 kg/yr = 0.0864 TPY

Using tar analysis data from Tonawanda Coke as a surrogate for BSO,

Chemical	Mass Fraction	Fugitive Particulate Charging Emissions (TPY)
Polycyclic Organic Matter(1)	0.287012	0.025

(1) Polycyclic organic matter (POM), a listed hazardous air pollutant (HAP) under Section 112(b) of the Clean Air Act, includes: Acenaphthene, Acenaphthylene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(ghi)perylene, Benz(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Naphthalene, Dibenzofurans, and Biphenyl.

Total particulate matter (PM) emissions were assumed to equal 1.7 times the BSO emissions and filterable PM emissions were assumed to be equal 0.8 times the BSO emissions, based on Revised Draft AP-42 Table 12.2-4. Lead emissions, based on coal dust analysis data presented in the U.S. EPA *Receptor Model Source Composition Library*, were estimated to be 0.044% by weight of the filterable PM, i.e., Lead = (0.00044) (0.8)(0.086) = 0.000 TPY. Other trace metals in coal dust were similarly calculated to be 0.000 TPY.

2.1.2 Gaseous Emissions (lighter fractions of raw coke oven gas)

Gaseous emissions from coke oven charging were estimated based on Revised Draft AP-42 Table 12.2-4, which provides pollutant ratios with respect to BSO emissions.

Chemical	Draft AP-42 Table 12.2-3 Ratio to BSO	Fugitive Gaseous Charging Emissions (TPY)
Benzene	0.5	0.043
1,3-Butadiene	0.009	0.001
Carbon Disulfide	0.001	0.000
Carbonyl Sulfide	0.001	0.000
Hydrogen Cyanide	0.05	0.004
Phenol	0.0006	0.000
Toluene	0.04	0.003
Xylene	0.005	0.000

2.2 DOOR LEAKS

2.2.1 Particulate Emissions

Particulate emissions from coke oven door leaks are mainly condensed COG emissions. BSO emissions from door leaks were estimated using Draft AP-42 and Coke Oven NESHAP visible emission limits (i.e., 1/1/03 MACT limits) on the percent leaking doors (PLD), the number of ovens and doors, and the hours of operation, i.e.,

BSO (TPY) = (PLD/100)(N_D)(0.11 lb/hr leak)(8760 hrs/yr)/(2000 lb/ton)

where

PLD = average percent leaking doors as determined by EPA Method 303
N_D = total number of doors on battery
0.011 = typical door leak, lb/hr

Battery	NESHAP Limit PLD	Average PLD Associated with NESHAP Limit	No. Ovens	No. Doors	BSO Emissions (kg/hr)
2	5.0	4.0	60	120	0.386
TOTAL					2.313 TPY

Using tar analysis data from Tonawanda Coke as a surrogate for BSO,

Chemical	Mass Fraction	Fugitive Particulate Door Emissions (TPY)
Polycyclic Organic Matter(1)	0.287012	0.664

(1) Polycyclic organic matter (POM), a listed hazardous air pollutant (HAP) under Section 112(b) of the Clean Air Act, includes: Acenaphthene, Acenaphthylene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(ghi)perylene, Benz(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Naphthalene, Biphenyl, and Dibenzofurans.

2.2.2 Gaseous Emissions

Gaseous emissions from door leaks were estimated from the estimated BSO emissions and Revised Draft AP-42 Table 12.2-4, which gives pollutant ratios to BSO emissions, i.e.,

Chemical	Draft AP-42 Table 12.2-3 Ratio to BSO	Fugitive Gaseous Door Emissions (TPY)
Benzene	0.5	1.156
1,3-Butadiene	0.009	0.021
Carbon Disulfide	0.001	0.002
Carbonyl Sulfide	0.001	0.002
Hydrogen Cyanide	0.05	0.116
Phenol	0.0006	0.001
Toluene	0.04	0.093
Xylene	0.005	0.012

2.3 TOPSIDE EMISSIONS

2.3.1 Particulate Emissions

BSO emissions from topside leaks were estimated using Revised Draft AP-42 and Coke Oven NESHAP visible emissions limits (i.e., 11/1/03 MACT limits) on percent leaking lids (PLL) and percent leaking offtakes (PLO), the number of ovens, and the hours of operation, i.e.,

$$E_T = [(PLL/100 \times N_L) + (PLO/100 \times N_O)](0.0033)$$

where

E_T = topside BSO emission rate (kg/hr)
PLL = average percent leaking lids
N_L = total number of lids on battery
PLO = average percent leaking offtakes
N_O = total number of offtakes on battery
0.0033 = typical lid/offtake leak rate (kg/hr)

Battery	NESHAP PLL Limit	Average PLL Assoc. with NESHAP Limit	NESHAP PLO Limit	Average PLO Assoc. with NESHAP Limit	No. Ovens	No. Lids Per Oven	No. Offtakes Per Oven	BSO Emissions (kg/hr)
2	0.6	0.3	3.0	2.2	60	4	1	0.0067
TOTAL								= 0.065 TPY

Using tar analysis data from Tonawanda Coke as a surrogate for BSO,

Chemical	Mass Fraction	Fugitive Particulate Charging Emissions (TPY)
Polycyclic Organic Matter(1)	0.287012	0.019

(1) Polycyclic organic matter (POM), a listed hazardous air pollutant (HAP) under Section 112(b) of the Clean Air Act, includes: Acenaphthene, Acenaphthylene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(ghi)perylene, Benz(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Naphthalene, Biphenyl, and Dibenzofurans

2.3.2 <u>Gaseous Emissions</u>

Gaseous emissions from topside leaks were estimated in the same manner as charging and door leak emissions; i.e., using the estimated BSO emission rate and the pollutant ratios to BSO listed in Draft AP-42 Table 12.2-3, i.e.,

Chemical	Draft AP-42 Table 12.2-3 Ratio to BSO	Fugitive Gaseous Topside Emissions (TPY)
Benzene	0.5	0.033
1,3-Butadiene	0.009	0.001
Carbon Disulfide	0.001	0.000
Carbonyl Sulfide	0.001	0.000
Hydrogen Cyanide	0.05	0.003
Phenol	0.0006	0.000
Toluene	0.04	0.003
Xylene	0.005	0.000

2.4 PUSHING

2.4.1 Particulate Emissions

Although coke pushing emissions are primarily carbon particles, source tests at several plants have indicated some organic emissions due to incomplete coking. The Tonawanda Coke pushing operation is uncontrolled.

The uncontrolled PM emissions can be estimated using the Revised Draft AP- 42 emission factor of 1.39 lb/ton coal for uncontrolled pushing, i.e.,

(1.39 lb/ton coal)(347,334 ton coal/year)/(2000 lb/ton) = 241.397 TPY PM (uncontrolled)

Another source of particulate emissions is the transport of the hot coke on the quench car (or hot car) to the quench tower. These fugitive emissions were estimated from an emission factor developed by the Jefferson County Department of Health (JCDH) for ABC Coke, Birmingham, AL. This PM emission factor, 0.03 lb/ton coal, is based on source tests conducted by Keystone Environmental Resources at the USS Clairton Works, Clairton, PA. For 347,334 tons of coal, hot car fugitive TSP and PM_{10} emissions are (0.03)(347,334)/2000 = 5.210 TPY.

The total PM emission rate is: 241.397 + 5.210 = 246.607 TPY.

The HAP metal compound emission rates for coke pushing and hot car transport were estimated from the total PM emissions estimated above and from September 1998 stack tests conducted by U.S. EPA at ABC Coke, Birmingham, AL, which indicated baghouse inlet particulate mass fractions for the following components:

Chemical	Baghouse Inlet Mass Fraction	Particulate Pushing Emissions (TPY)
Antimony	1.59×10^{-7}	0.000
Beryllium	4.25×10^{-7}	0.000
Cobalt	1.99×10^{-6}	0.000
Nickel	1.89×10^{-5}	0.005
Selenium	4.01×10^{-6}	0.001
Lead	1.80×10^{-5}	0.004
Arsenic	1.23×10^{-5}	0.003
Cadmium	3.60×10^{-6}	0.001
Manganese	2.20×10^{-5}	0.005

The emission rates of condensed organics from coke pushing and quench car transport were estimated from Erie Coke quench car scrubber exhaust duct stack tests conducted by Advanced Technology Systems, Inc. on November 11 and 12, 1998, during which uncontrolled emission rates of 19 polynuclear aromatic hydrocarbon compounds were measured. These emission rates, expressed in lb/hr, result in the following annual potential emissions:

Chemical	Stack Test Emission Rate (lb/hr)	Annual Emissions (TPY)
POM(1)	1.97×10^{-4}	0.001

(1) Polycyclic organic matter (POM), a listed hazardous air pollutant (HAP) under Section 112(b) of the Clean Air Act, includes: Acenaphthene, Acenaphthylene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(ghi)perylene, Benz(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Naphthalene, Biphenyl and Dibenzofurans.

The emissions of methylene chloride extractable matter (MCEM), which is a surrogate for coke oven emissions (a listed HAP), were estimated from 1998 EPA test data at ABC Coke. These data indicated an MCEM emission factor of 1.04×10^{-2} lb/ton coke pushed. For an annual coke production rate of 287,620 TPY,

$$(1.04 \times 10^{-2}\ \text{lb/ton})(287{,}620\ \text{TPY})/2000 = 1.496\ \text{TPY}$$

(Note: Methylene chloride extractable matter includes semivolatile organics such as POM.)

2.4.2 Gaseous Emissions

VOC emissions from coke pushing operations were estimated using hot car push emissions testing data collected at Erie Coke on April 10, 11, and 12, 2003, by Microbac Laboratories, Inc. This testing indicated the following emission factors (lb/ton coal):

Chemical	Emission Factor (lb/ton coal)	Gaseous Pushing Emissions (TPY)
Benzene	$< 8.96 \times 10^{-5}$	< 0.016
Phenol	$< 1.49 \times 10^{-5}$	< 0.003
Methanol	$< 5.06 \times 10^{-4}$	< 0.088

Note: Test results for all sample runs were below analytical detection limits.

Emissions of other gaseous components were estimated from Revised Draft AP-42 emission factors as presented in Table 12.2-9,

Chemical	Emission Factor (lb/ton coal)	Pushing Emissions (TPY)
Acrolein	1.02×10^{-4}	0.018
Acetonitrile	9.27×10^{-5}	0.016
Acrylonitrile	4.57×10^{-4}	0.079
1,4-Dioxane	1.60×10^{-4}	0.028
Methyl Methacrylate	1.82×10^{-4}	0.032
Methylene Chloride	8.10×10^{-6}	0.001
Styrene	4.85×10^{-5}	0.008
1,1,2,2-Tetrachloroethane	7.81×10^{-5}	0.014
Toluene	5.02×10^{-5}	0.009
Vinyl Acetate	1.57×10^{-4}	0.027
Cyanide	6.41×10^{-4}	0.111

2.5 QUENCHING

Particulate emissions from quenching are typically large carbon particulate created by the breakup of hot coke upon contact with water. PM emissions are a function of quench tower controls (i.e., use of baffles) and the quench water Total Dissolved Solids (TDS) level. The Tonawanda Coke quench tower has baffles for control of PM emissions. Furthermore, Tonawanda Coke uses quench water with a TDS level within the range which is classified by EPA as "clean." Applying the Draft AP-42 emission factor for controlled quenching with clean water,

PM = (0.31 lb/ton coal) (347,334 tons) / 2000 = 53.837 TPY

Speciation of the PM emissions applying the September 1998 test results for coke pushing (as an estimated upper limit) results in the following:

HAP	Mass Fraction	Emissions (TPY)
Lead	1.80×10^{-5}	0.001
Arsenic	1.23×10^{-5}	0.001
Cadmium	3.60×10^{-6}	0.000
Nickel	1.89×10^{-5}	0.001
Selenium	4.01×10^{-6}	0.000
Manganese	2.20×10^{-5}	0.001

2.6 UNDERFIRE STACKS

2.6.1 Particulate Emissions

August 1996 Erie Coke stack test data obtained by Advanced Technology Systems, Inc. indicate a particulate matter emission factor of 0.123 lb/ton coal. Annual PM emissions were calculated as follows:

(0.123 lb/ton coal) (347,334 tons coal/year) / (2000 lb/ton) = 21.361 TPY

Speciation of the particulate emissions from underfiring was conducted using stack test data from ABC Coke obtained by Pacific Environmental Services, Inc. for U.S. EPA September 24-25, 1998, which indicated the following particulate mass fractions:

Chemical	Mass Fraction	Emissions (TPY)
POM(1)	1.161×10^{-3}	0.025

(1) Polycyclic organic matter (POM), a listed hazardous air pollutant (HAP) under Section 112(b) of the Clean Air Act, includes: Acenaphthene, Acenaphthylene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(ghi)perylene, Benz(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Naphthalene, Biphenyl, and Dibenzofurans

Emission factors for HAP metal compounds derived from the 1998 ABC Coke test data are of the order 10^{-8} lb/ton coal charged, which result in negligible annual emissions.

The emissions of methylene chloride extractable matter (MCEM), which is a surrogate for coke oven emissions (a listed HAP), were estimated from 1998 EPA test data at ABC Coke. These data indicated an MCEM emission factor of 3.50×10^{-3} lb/ton coal charged. For an annual coal charge of 347,334 TPY,

$$(3.50 \times 10^{-3} \text{ lb/ton})(347{,}334 \text{ TPY})/2000 = 0.608 \text{ TPY}$$

(Note: Methylene chloride extractable matter includes semivolatile organics such as POM.)

2.6.2 Gaseous Emissions

Gaseous HAP emissions are estimated using Revised Draft AP-42 emission factors,

Pollutant	Emission Factor (lb/ton coal)	Emissions (TPY)
Benzene	0.015	2.605
Toluene	0.0066	1.146
Phenol	5.11×10^{-6}	0.001
Bis(2-ethylhexyl)phthalate	6.79×10^{-6}	0.001

3. EMISSIONS FROM STORAGE TANKS AND PROCESS VESSELS

Potential HAP emissions from coke byproduct recovery plant storage tanks and process vessels were calculated using facility test data and the U.S. EPA TANKS program, which incorporates the AP-42 emission factors.

Emission estimates from tank testing were based on sample collection with an activated carbon filter to obtain concentration estimates, combined with material analysis data and tank flow estimates.

Available site-specific data/information used in the TANKS emission calculations included:

1) tank dimensions (i.e., length/height, diameter)
2) tank mounting (i.e., horizontal or vertical)
3) tank color, paint condition, and exposure to sunlight
4) tank volume and normal liquid level
5) tank contents and annual throughput
6) tank temperature and pressure
7) climatological data for Erie, PA
8) tank emission controls (e.g., gas blanketing)

A summary of byproduct plant storage tank/process vessel emission estimates is presented in Table 3-1.

Exhibit 3

Table 3-1: Summary of Estimated Potential Annual Emissions from Storage Tanks and Process Vessels

Tank	Gas Blanketing	Height (ft)	Diameter or Length/Width (ft)	Tank Orientation	Estimated Emissions (TPY)			Method of Calculation
					Benzene	Toluene	Xylenes	
Tar Decanter	Suction	10	30 x 10	Horizontal	0.000	0.000	0.000	Testing
Tar Storage Tank #1	Suction	10	10	Horizontal	0.000	0.000	0.000	Testing
Tar Storage Tank #2	Suction	10	10	Horizontal	0.000	0.000	0.000	Testing
Light Oil Storage Tank	No	10	9	Horizontal	0.295	0.026	0.002	TANKS
Flushing Liquor Circulation Tank	Suction	10	10	Horizontal	0.000	0.000	0.000	Testing
Light Oil Condenser Vent	Sealed	50	2 " dia	Vertical	0.000	0.000	0.000	Testing
Wash oil Decanter #1	Sealed	10	30 x 10	Horizontal	0.000	0.000	0.000	Testing
Wash oil Decanter #2	Sealed	10	10	Horizontal	0.000	0.000	0.000	Testing
Flushing Liquor Circulation Tank	Suction	10	10	Horizontal	0.000	0.000	0.000	Testing
Excess Ammonia Liquor Tank	No	30	40	Vertical	0.000	0.000	0.000	TANKS

4. EMISSIONS FROM BYPRODUCT PLANT EQUIPMENT COMPONENTS

Fugitive hydrocarbon emissions from equipment components (e.g., valves, flanges, pumps, compressors, etc.) in the coke by-products plant were estimated using:

1) facility data on equipment component counts, stream composition data, and organic vapor analyzer (OVA) leak screening results (i.e., Method 21 screening data) and

2) U.S. EPA refinery equipment leak emission factors, correlation equations, and default zero emission rates, as presented in U.S. EPA *Protocol for Equipment Leak Emission Estimates*, EPA-453/R-95-017, November 1995.

Facility-specific liquid or vapor steam compositions were used to speciate the fugitive hydrocarbon emissions for the facility.

The following tables provide the fugitive equipment component counts for each coke by-products plant area and stream composition category, service category (gas, light liquid, etc.), emission factor/default zero leak rate used, and the calculated emissions in tons per year.

Table 4-1: Summary of Tonawanda Coke Equipment Component Emission Calculations

Byproducts Plant Area	Component Type	Number of Components	Emission Factor (kg/hr/source)	Total Organic Compound Emissions (TPY)
Weak Liquor System	Valves	232	7.8E-06[1]	0.0175
	Flanges	363	3.1E-07[1]	0.0011
	Pumps	12	2.4E-05[1]	0.0028
			Subtotal	***0.0214***
Tar System	Valves	10	7.8E-06[1]	0.0008
	Flanges	40	3.1E-07[1]	0.0001
	Pumps	1	2.4E-05[1]	0.0002
			Subtotal	***0.0011***
Light Oil System	Valves	36	7.8E-06[1]	0.0027
	Flanges	37	3.1E-07[1]	0.0001
	Pumps	2	2.4E-05[1]	0.0005
			Subtotal	0.0033
Coke Oven Gas System	Exhausters[3]	2	3.08E-04[2]	0.0030
	Pressure Relief Valves	1	3.08E-04[2]	0.0030
	Valves	35	1.19E-04[2]	0.0402
			Subtotal	***0.0462***

Notes:

(1) Emission factors for the weak liquor and tar systems represent the refinery default zero emission rates, as all components were found to screen at background concentrations

(2) Emission factors for the coke oven gas system are based on the refinery correlation equations at a screening concentration of 200 ppm.

(3) Only one exhauster operates at any given time.

Table 4-2: Speciation of Tonawanda Coke Equipment Component Emissions

Byproducts Plant Area	Total Organic Compound Emissions (TPY)	Hazardous Air Pollutant	Mass Fraction	Emissions (TPY)
Weak Liquor System	0.0214	Naphthalene	21.5E-06	0.000
		Benzene	12.65E-06	0.000
		Toluene	2.60E-06	0.000
		Xylene	0.500E-06	0.000
Tar System	0.0011	Naphthalene	0.1050	0.000
		POM	0.1702	0.000
		Benzene	0.0007	0.000
		Phenol	0.0024	0.000
		Toluene	0.0010	0.000
Light Oil System	0.0033	Benzene	0.5937	0.002
		Toluene	0.1913	0.001
		Xylene	0.0383	0.000
		Naphthalene	0.0446	0.000
Coke Oven Gas System	0.0544	Benzene	0.007	0.000
		Toluene	0.0029	0.000
		Xylene	0.0011	0.000

5. EMISSIONS FROM LIQUID LOADING OPERATIONS

Fugitive evaporative emissions from liquid loading operations for tar and light oil were based on:

1) the AP-42 loading equation:

$$L = 12.46\ SMP/T$$

where
- L = loading loss ($lb/10^3$ gal loaded)
- S = saturation factor = 1.45 for splash loading
- M = vapor molecular weight
- P = vapor pressure, psia
- T = temperature of liquid, °R

2) facility data on tar and light oil composition and throughput

The results of these calculations are presented in Table 5-1.

Exhibit 3

Table 5-1

Tonawanda Coke - Potential HAP Emission Estimates for Liquid Loading Operations

i) Tar : 868,335 gallons (150 deg F, uncontrolled)

Chemical	Molecular Weight	Weight Percent	Pure Vapor Pressure (psia)	Partial Vapor Pressure (psia)	Loading Loss (tons/yr)	Loading Loss (lbs/yr)
Benzene	78.1	0.0680%	9.1661	1.708E-002	0.017	34
Dibenzofurans	168.11	0.9500%	0.0071	8.587E-005	0.000	0
Naphthalene	128.2	10.5000%	0.0537	9.415E-003	0.016	31
Styrene	104.2	0.0000%	0.9783	0.000E+000	0.000	0
Toluene	92.0	0.0980%	3.3301	7.592E-003	0.009	18
m-Xylene	106.2	0.0169%	1.6358	5.571E-004	0.001	2
o-Xylene	106.2	0.0169%	1.0082	3.434E-004	0.000	1
p-Xylene	106.2	0.0169%	1.2463	4.245E-004	0.001	1
Acenaphthene	154.21	0.0842%	0.0074	8.649E-006	0.000	0
Acenaphthylene	152.21	2.1300%	0.0041	1.228E-004	0.000	0
Anthracene	178.23	1.1400%	6.8E-005	9.309E-007	0.000	0
Benzo(a)anthracene	228.3	0.8740%	2.9E-005	2.376E-007	0.000	0
Benzo(a)pyrene	252.3	0.4600%	1.9E-006	7.414E-009	0.000	0
Benzo(b)fluoranthene	252.2	0.4860%	1.3E-005	5.362E-008	0.000	0
Benzo(k)fluoranthene	252.2	0.3720%	1.3E-005	4.104E-008	0.000	0
Chrysene	228.2	1.3100%	6.1E-007	7.495E-009	0.000	0
Dibenz(a,h)anthracene	278.36	0.1060%	2.3E-008	1.875E-011	0.000	0
Flouranthene	202	2.2100%	0.0000	2.901E-007	0.000	0
Fluorene	166	1.8700%	0.0032	7.738E-005	0.000	0
Indeno(1,2,3-cd)pyrene	276.34	0.2050%	2.5E-008	3.969E-011	0.000	0
Phenanthrene	178.22	4.2000%	0.0007	3.531E-005	0.000	0
Phenol	94.1	0.2440%	0.1297	7.196E-004	0.001	2
Pyrene	202.3	1.5700%	6.2E-005	1.030E-006	0.000	0
Others	250	71.0721%	0.0001	6.084E-005	0.000	0
				Total	0.045	90.458

ii) Light Oil : 521,001 gallons (10 deg C, 0% Controlled)

Chemical	Molecular Weight	Weight Percent	Pure Vapor Pressure (psia)	Partial Vapor Pressure (psia)	Loading Loss (tons/yr)	Loading Loss (lbs/yr)
Benzene	78.1	59.37%	0.8791	5.808E-001	0.419	837
Acenaphthylene	152.21	0.05%	1.0E-007	2.855E-011	0.000	0
Anthracene	178.23	0.08%	3.0E-009	1.170E-012	0.000	0
Cresol	108.2	0.03%	0.0010	2.422E-007	0.000	0
MTBE	88.2	0.09%	0.8060	7.152E-004	0.001	1
Ethylbenzene	106.2	0.18%	0.0760	1.119E-004	0.000	0
Flourene	166	0.03%	0.0000	6.735E-009	0.000	0
Indene	116.2	3.66%	0.0126	3.456E-004	0.000	1
Naphthalene	128.2	4.46%	0.0001	2.650E-006	0.000	0
Phenol	94.1	0.59%	0.0011	6.124E-006	0.000	0
Pyridine	79.1	0.15%	0.1677	2.764E-004	0.000	0
Phenanthrene	178.2	0.03%	4.00E-007	5.852E-011	0.000	0
Styrene	104.2	1.75%	0.0502	7.320E-004	0.001	1
Toluene	92.0	19.13%	0.2400	4.337E-002	0.037	74
1,2,4-Trimethylbenzene	120.2	0.61%	0.0163	7.195E-005	0.000	0
1,3,5-Trimethylbenzene	120.1	0.34%	0.0163	4.014E-005	0.000	0
m-Xylene	106.2	1.49%	0.0911	1.111E-003	0.001	2
o-Xylene	106.2	0.85%	0.0492	3.421E-004	0.000	1
p-Xylene	106.2	1.49%	0.0683	8.333E-004	0.001	2
Others	130	5.62%	0.0220	0.000E+000	0.000	0
				Total	0.460	919.498

Total VOC Emissions: 0.505 TPY

6. FLARE EMISSIONS

The Tonawanda Coke facility does not produce enough excess COG to operate the bleeder flare.

7. BOILER EMISSIONS

Tonawanda Coke has one boiler rated at 60 MMBtu/hr. This boiler burns both COG and natural gas. At a potential battery coal charge rate of 347,334 tons/year, the plant produces 2,778.672 MMCF of COG, based on a COG yield of 8000 CF/ton. The facility uses 5.76 MMCF of COG per day for battery underfiring, or 2,108.160 MMCF/yr. This leaves 2,778.672 - 2,108.160 = 670.512 MMCF/yr, or 335,256 MMBtu/yr for the boiler due to COG firing. Based on a potential boiler heat input of (60 MMBtu/hr)(8760 hr/yr) = 525,600 MMBtu/yr, the available heat input from natural gas firing is 525,600 - 335,256 = 190,344 MMBtu/yr. At 1000 MMBtu/MMCF, this is equivalent to 190.344 MMCF natural gas.

Using the AP-42 Section 1.4 emission factors for natural gas combustion, the following HAP emissions are estimated:

Pollutant	Emission Factor (lb/MMCF)	Emissions (TPY)
Benzene	2.1 E-03	0.000
Toluene	3.4 E-03	0.000
Naphthalene	6.1 E-04	0.000
Formaldehyde	7.5 E-02	0.007
Lead	0.0005	0.000
Arsenic	2.0 E-04	0.000
Beryllium	<1.2 E-05	0.000
Cadmium	1.1 E-03	0.000
Chromium	1.4 E-03	0.000
Manganese	3.8 E-04	0.000
Mercury	2.6 E-04	0.000
Nickel	2.1E-03	0.000
Selenium	<2.4 E-05	0.000

There are no published HAP emission factors for COG combustion in boilers.

8. MISCELLANEOUS EMISSIONS

There are a number of miscellaneous emission sources at the facility as described below.

Steam Stripping of Ammonia Liquor

The facility steam strips 75,000 gal/day (2.7375 x 10^7 gal/yr) of ammonia liquor. It is assumed that all of the volatile HAP components of the ammonia liquor is released to the air, while 50% of the semi-volatile components is released. Emission calculations are summarized below.

Chemical	Concentration in Ammonia Liquor (ppm)	Emissions (TPY)
Benzene	12.65	1.444
Toluene	2.60	0.297
Xylene	0.500	0.057
Naphthalene	21.5	1.227

9. SUMMARY OF POTENTIAL HAP EMISSIONS

Table 9-1 summarizes the estimated potential HAP emissions by source category for each criteria air pollutant.

Table 9-1 indicates that the HAPs with the highest annual potential emissions are benzene (6.038 TPY) and coke oven emissions (4.568 TPY) and, which are well below the HAP major source threshold of 10 TPY for a single HAP. The sum of all HAPs is 14.159 TPY, which is well below the HAP major source threshold of 25 TPY for aggregate HAPs (NOTE: In the summation of total HAP emissions, POM emissions from coke oven charging, door leaks, topside leaks, pushing, and underfiring were assumed to be included as coke oven emissions, in order to avoid double-counting).

Based on these results, the Tonawanda Coke Plant is *not* a major source of HAP emissions.

Exhibit 3

Table 9-1: Summary of Potential Annual HAP Emissions for the Tonawanda Coke Plant

Source	HAP Emissions (TPY)						
	Benzene	Bis(2-ethylhexyl) phthalate	1,3-Butadiene	Carbon Disulfide	Carbonyl Sulfide	Coke Oven Emissions[1]	Cyanide Compounds
Coke Oven Charging	0.043		0.001	0.000	0.000	0.086	0.004
Oven Door Leaks	1.156		0.021	0.002	0.002	2.313	0.116
Oven Topside Leaks	0.033		0.001	0.000	0.000	0.065	0.003
Coke Pushing	0.016					1.496	0.111
Coke Quenching							
Battery Underfiring	2.605	0.001				0.608	
Byproducts Tanks	0.295						
Byproduct Equip. Leaks	0.002						
Liquid Loading	0.436						
Flare							
Boilers	0.008						
Ammonia Liquor Steam Stripping	1.444						
TOTAL	**6.038**	**0.001**	**0.023**	**0.002**	**0.002**	**4.568**	**0.234**

Note:

(1) Coke Oven Emissions assumed to represent Benzene Soluble Organic (BSO) emissions from coke oven charging, door leaks, and topside leaks and Methylene Chloride Extractable Organics from coke pushing and battery underfiring.

Exhibit 3

Table 9-1: Summary of Potential Annual HAP Emissions for the Tonawanda Coke Plant (Continued)

Source	1,4-Dioxane	Phenol	POM(2)	Methyl Metha-crylate	Methylene Chloride	Methanol	Toluene	Xylene
Coke Oven Charging		0.000	0.025				0.003	0.000
Oven Door Leaks		0.001	0.664				0.093	0.012
Oven Topside Leaks		0.000	0.019				0.003	0.000
Coke Pushing	0.028	0.003	0.001	0.032	0.001	0.088	0.009	
Coke Quenching								
Battery Underfiring		0.001	0.025				1.146	
Byproducts Tanks							0.026	0.002
Byproduct Equip. Leaks							0.001	
Liquid Loading		0.001	0.016				0.046	0.004
Flare								
Boilers								
Ammonia Liquor Steam Stripping			1.227				0.297	0.057
TOTAL	**0.028**	**0.006**	**1.977**	**0.032**	**0.001**	**0.088**	**1.624**	**0.075**

Note:

(2) Polycyclic organic matter (POM), a listed hazardous air pollutant (HAP) under Section 112(b) of the Clean Air Act, includes: Acenaphthene, Acenaphthylene, Fluorene, Phenanthrene, Naphthalene, Dibenzofurans, Biphenyl, Anthracene, Fluoranthene, Pyrene, Benzo(ghi)perylene, Benz(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Dibenzo(a,h)anthracene, and Indeno(1,2,3-cd)pyrene

Exhibit 3

Table 9-1: Summary of Potential Annual HAP Emissions for the Tonawanda Coke Plant (Continued)

Source	HAP Emissions (TPY)							
	Acrolein	Aceto-nitrile	Acrylo-nitrile	Form-aldehyde	MTBE	Styrene	Vinyl Acetate	1,1,2,2-Tetra-chloro-ethane
Coke Oven Charging								
Oven Door Leaks								
Oven Topside Leaks								
Coke Pushing	0.018	0.016	0.079			0.008	0.027	0.014
Coke Quenching								
Battery Underfiring								
Byproducts Tanks								
Byproduct Equip. Leaks								
Liquid Loading					0.001	0.001		
Flare								
Boilers				0.007				
Ammonia Liquor Steam Stripping								
TOTAL	**0.018**	**0.016**	**0.079**	**0.007**	**0.001**	**0.009**	**0.027**	**0.014**

Table 9-1: Summary of Potential Annual HAP Emissions for the Tonawanda Coke Plant (Continued)

Source	HAP Emissions (TPY)					
	Arsenic	Cadmium	Lead	Manganese	Nickel	Selenium
Coke Oven Charging						
Oven Door Leaks						
Oven Topside Leaks						
Coke Pushing	0.003	0.001	0.004	0.005	0.005	0.001
Coke Quenching	0.001	0.000	0.001	0.001	0.001	0.000
Battery Underfiring						
Byproducts Tanks						
Byproduct Equip. Leaks						
Liquid Loading						
Flare						
Boilers						
Ammonia Liquor Steam Stripping						
TOTAL	**0.004**	**0.001**	**0.005**	**0.006**	**0.006**	**0.001**

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United States Environmental Protection Agency
Criminal Investigation Division
Investigative Activity Report

Case Number
0202-0112

Case Title:
Tonawanda Coke Corporation - Smokestack Discharge

Reporting Office:
Syracuse, NY, Resident Office

Subject of Report:
Proffer with Dennis Mock - Boiler House Supervisor at Tonawanda Coke Corporation

Activity Date:
July 28, 2010

Reporting Official and Date:
Robert J. Conway, SA
23-AUG-2010, Signed by: Robert J. Conway, SA

Approving Official and Date:
William V. Lometti, SAC
23-AUG-2010, Approved by: David G. McLeod, ASAC

SYNOPSIS

07/28/2010 - Dennis Mock supervises the boiler house department at TCC that included a second pressure relief valve that didn't have a flare system. This valve, called the water seal bleeder valve, was controlled by Mock and his operators to regulate coke oven gas pressure in the collector main. This interview focuses on the existence of this second pressure relief valve.

DETAILS

On Wednesday July 28, 2010, United States Environmental Protection Agency Criminal Investigation Division (EPA-CID) special agent Robert Conway interviewed Tonawanda Coke Corporation (TCC) boiler house supervisor Dennis Mock under a proffer agreement. Mr. Mock's counsel, Melissa Gomez and Tom Kelly of Venable, LLC, was also present.

Mr. Mock started working at TCC in November 1978 and worked numerous positions until becoming the supervisor of the boiler house (BH) in March 1997. Mock did receive a substantial pay increase when he was promoted to this position. Other work assignments while at TCC included ovens, oven supervisor, general foreman, coal handling, and then back to general foreman respectively prior to moving into the boiler house supervisor slot. Mock worked for two months with outgoing BH supervisor Bill Lowman and the units operators prior to taking over completely. Mock described the duties of his department as monitoring boiler operations 24/7; cleaning burners once/shift; blowing down the boiler twice/shift; checking pumps; lubricating equipment; and boiler water treatment. Mock further explained the water treatment process as obtaining the water from the Niagara River, filtering the water, and then running the water through a softening unit. Mock stated that TCC is not generating there own power and steam currently because it is not cost effective at this time.

The boiler house water seal bleeder valve (WSBV) relieves pressure in the coke oven gas line just like the pressure relief valve (PRV) in the by-products department. The WSBV contains a control valve that sets the pressure value for release. Any released gas passes through the water in the valve prior to being emitted to the atmosphere through a 20-30 foot high pipe with a larger diameter. Mock admitted that he along with his operators and the general foremen adjusted the pressure setting on the WSBV. Mock would observe any changes to the pressure setting by inspecting the chart recorder and foreman's logbook. Mock was careful to add that not all adjustments were entered into the logbook.

Mr. Mock also stated that the WSBV is generally set 10-15 cm higher than the PRV in the by-products department. The WSBV didn't actuate often as the by-products PRV was the first line

United States Environmental Protection Agency
Criminal Investigation Division
Investigative Activity Report

Case Number
0202-0112

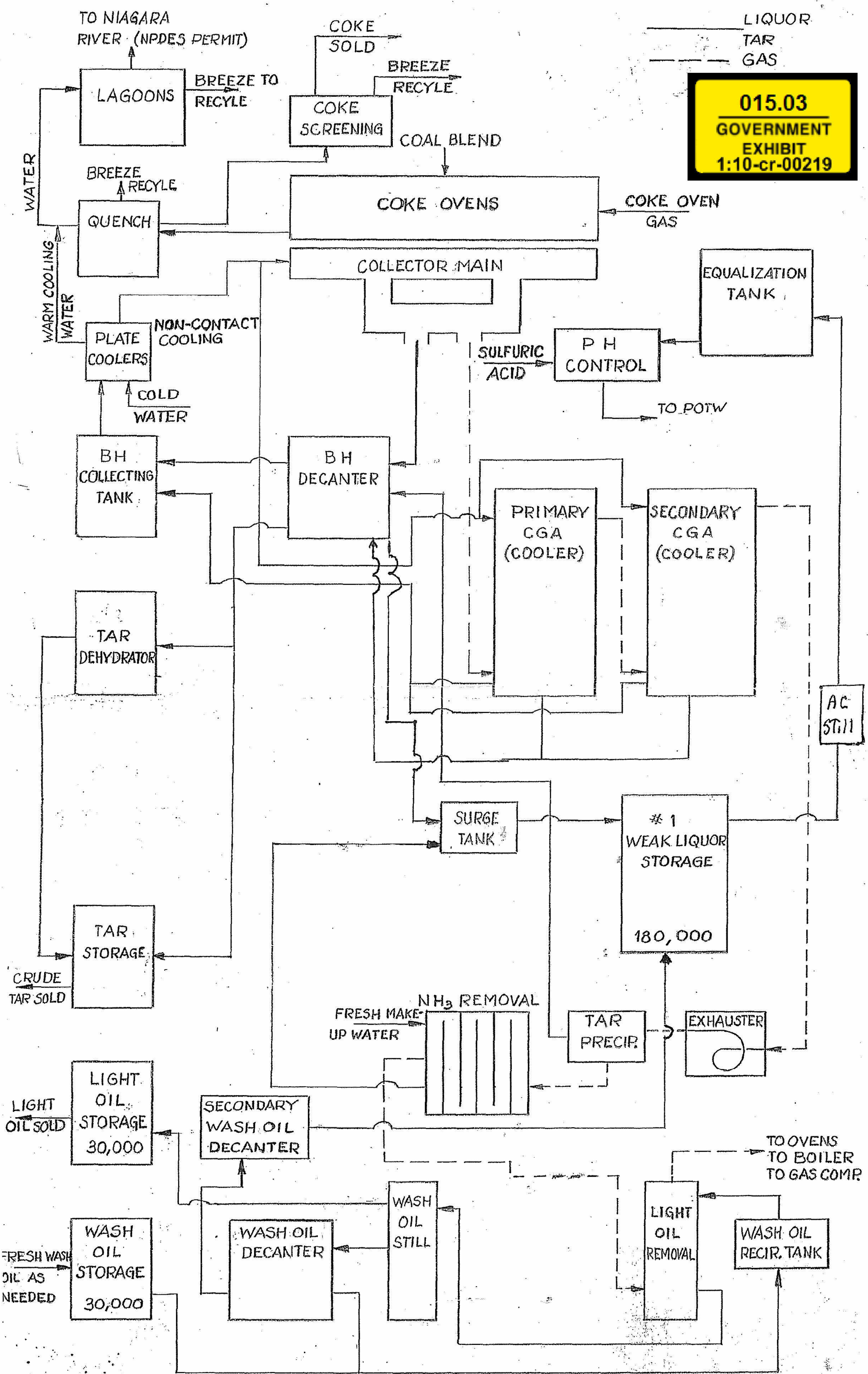
of defense for maintaining a maximum pressure in the collector main. Mock recalled an incident where the WSBV discharged over a long period of time and some of the water in the valve overflowed. This overflow water drained into the sanitary sewer system where TCC lab technician Bruce Schlager stated he had high concentrations of contaminants after testing. The WSBV was a part of Allied Chemical's operations, so recently the valve began to fail and leak. The WSBV has been taken off-line and replaced with a new flare stack. Mock told us that he knew of the valve's existence since 1981 and that at no time was a flare installed on the valve. This valve also experienced fire incidents due to lighting strikes and the suppression standard was the same as that in the by-products department, i.e. add steam to the line. Mock said the valve rarely released and only if the coke production rate was high, i.e. greater than 36 oven pushes per day. Mr. Mock reiterated that the WSBV was set 10-15 cm higher than the general setting of the by-products PRV which typically ran between 80-100 cm. Mr. Mock stated that the WSBV rarely discharged after installation of the by-products PRV. The valve purely became a back-up in the event of an exhauster failure situation.

Mr. Mock also stated that the coal tar sludge was mixed in with the coal and immediately transported to the coal handling tower. No coal tar pad existed at TCC at this point. Mock said the coal tar pad was installed in the 1990s as the coal crane was still operating at the time. Mock admitted that he didn't have much contact with TCC environmental manager Mark Kamholz. At no time did Mock falsify reports or observe any uncomfortable incidents or situations. Mock did recall a transformer that came out of the boiler house though. Mock didn't know if the transformer was drained of its oil prior to disposal. The transformer was dead already and sat outside the power house prior to going to the aging pad. Mock ended the interview by saying that the new boiler house flare system was set at 55 cm currently and that it helped reduce pressure buildups on heating flue reversals. The oven back pressure though remains unaffected.

Exhibit 5

TCMH-05

015.03 GOVERNMENT EXHIBIT 1:10-cr-00219



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